Module 13 Perimeter, Area, and Volume

Lesson 6 Surface Area: Pyramids and Cones

Notes 13.6

## **Lesson Objectives**

- Derive and use formulas for surface area of pyramids and cones.
- Use square units to find the surface area of pyramids and cones.

## **Subtopic 1** Surface Area of Pyramid

The \_\_\_\_\_ of a regular pyramid is the height of a lateral face.

Surface Area of a Pyramid

L =

*SA* = \_\_\_\_\_

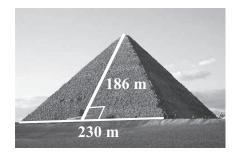


Find the total amount of material needed to construct the tent.





Find the approximate lateral area of the Great Pyramid at Giza, Egypt. It is a square pyramid with an approximate base length of 230 meters and a slant height of 186 meters.



## Subtopic 2

## **Surface Area of Cone**

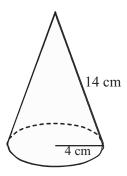
The slant height of a cone is the distance from the \_\_\_\_\_ to the \_\_\_\_ of the base.

Surface Area of a \_\_\_\_\_

*SA* = \_\_\_\_\_



Find the surface area of the cone.



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The antenna on a sailboat provides a "cone of protection" from lightning around the boat. This cone of protection has a diameter of 72 feet and a slant height of 60 feet. Find the surface area of the cone of protection. Round the answer to the nearest foot.

